

# **CORENTIUM PRO STARTUP GUIDE**

### IN THE BOX YOU WILL FIND THE FOLLOWING

- Corentium Pro monitor
- Storage case
- 3 AA batteries
- Allen wrench/hex key
- USB cable to connect the device to your computer using CRA PC Software
- Calibration certificate

### ON THE BACK OF THE DEVICE

- Serial number
- Calibration date
- Tripod socket to be used with a camera tripod (not included)

### FRONT SIDE OF THE DEVICE

- Reset button
- USB slot for the USB cable top right
- Anti-theft lock slot for use with a laptop cable lock (not included)

### THINGS TO KNOW

Use the Allen wrench/hex key to unscrew the lid on the backside of the device to install the 3 AA batteries. As soon as the batteries are inserted, the device will start reading automatically. The device will then beep and flash for approximately 45 seconds. Then it will flash green. There is no OFF/ON button. The unit remains on at all times and the approximate battery life span is 18 months. To view the battery life, go to the *Connect* field on the main menu of the app. The battery icon is located on the right-hand side.

https://manual-bab.co

### DOWNLOADING THE APP

- iPhone and iPad, go to the Apple App Store and download the Corentium Pro App.
- Android phones and tablets, go to Google Play and download the Corentium Pro App.

Once you download the app, click on the 3 horizontal lines (iOS) or the 3 dots (Android) and this will bring you to *Profile & Settings*. This is where you will enter the user information, the measurement units, number of datasets to load each time and logos.

## **CONNECTING TO THE DEVICE**

Click on Connect located in the top right corner. Here you will find 4 menus:

- SCHEDULE: This is where you go to schedule a test. For more information, view the video in FAQ.
- REPORT: This is where you will find all of the datasets. To create a report, select the desired dataset from the list. For more information, view the video in FAQ.
- CHART: The chart menu will provide temperature, humidity, pressure, and radon levels for the selected dataset.
- DEVICE INFO: You will find the device serial number, the device firmware, device clock, device status and the calibration expiry date.

### **HOW TO START A MEASUREMENT**

Starting a measurement is easy when you use the Corentium Pro App. Connect to the App and go to *Schedule* (do not press the reset button). Simply enter the information in the blank fields and choose the desired test time. If you do not have your phone or tablet and need to start a new measurement, you can do so by pressing the reset button located at the front side of the monitor. For more information, view the video in FAQ.

### CPA PC SOFTWARE AND USER MANUAL FOR ADVANCED PC USERS

The Windows based CRA PC Software is a tool that is used to create reports, firmware and hardware updates, and deleting datasets from the device. To download the software, go to FAQ at **support.airthings.com**, click *PC Software: CRA Software (latest version)*. The CRA user manual is also available here under, *User Manual & Software - Corentium Pro*.

# **MORE INFORMATION**

Please go to **support.airthings.com** and click *PRO* to find videos, articles and more. Don't hesitate to contact us with further questions. We hope you enjoy your new Corentium Pro monitor.

# Corentium Pro

# by Airthings

# MONITOR MANUAL





- A POWER ON / MONITOR RESTART
- B BLUETOOTH COMMUNICATION
- C INSTRUCTION LIGHTS (LEDS)
- 1 KENSINGTON LOCK
- 2 USB CONNECTION
- 3 BATTERY COMPARTMENT 4 TRIPOD MOUNT THREAD
- 5 CALIBRATION LABEL
- 6 SERIAL NUMBER LABEL

SPECIFICATION	
Sampling Method	Passive radon diffusion chamber
Detection Method	Alpha spectrometry
Power Supply	3 AA alkaline battery (LR06) ~ 18 months battery life-time
Dimensions	5.5 x 5.5 x 1.2 inches 140 x 140 x 30 mm
Weight	10.6 ounces (incl. batteries) 300 grams (incl. batteries)
Operation Environment Temperature Relative Humidity	39 to 104 °F 4 to 40 °C < 85 % RH
Measurement Range	0 - 2700 pCi/L 0 - 100000 Bq/m <sup>3</sup>
Measurement uncertainty After 1 day After 7 days	Std dev < 7 % + 0.12 pCi/L Std dev < 7 % + 5 Bq/m <sup>3</sup> Std dev < 5 % + 0.05 pCi/L Std dev < 5 % + 2 Bq/m <sup>3</sup>
Diffusion time constant	25 minutes
Internal memory storage capacity	5 years at 1h time resolution
Temperature sensor Range Resolution Accuracy	39 to 104 °F 4 to 40 °C 0.36 °F 0.2 °C ± 1 °F (typical), ± 2 °F (max) ± 0.5 °C (typical) , ± 1 °C (max)
Humidity sensor Range Resolution Accuracy	5 % RH to 85 % RH (non-condensing 0.5 % RH ± 4.5 % (in range 20 - 80 % RH)
Barometric pressure sensor Range Resolution Accuracy	50.0 kPa to 115.0 kPa 0.06 kPa ± 1 kPa





### USAGE

#### **SAFETY**

Contact the seller if the product requires service or repairs. The cover must not be opened.

Avoid subjecting the unit to shock, impact, pressure, vibrations, dust and moisture. Condensation can occur if the unit is moved from a location with high atmospheric humidity to a cold location. If condensation occurs, remove the batteries and leave the unit in a dry environment for 2 hours. The instrument should not be used in environments with more than 85 % RH. The unit must not be exposed to direct sunlight for extended periods. The monitor must be stored under dry conditions.

Use only batteries of type LR06, alkaline AA batteries. The batteries must not be exposed to fire or other extreme heat. The battery terminals must not be touched, and they must be kept free from dust, sand, liquids and other foreign objects.

Use Kensington Lock for securing the instrument from theft, being moved during measurement, etc.

### **CALIBRATION**

The monitor is tested, quality assured and calibrated by manufacturer. Calibration certificate is valid for one year.

### **GETTING STARTED**

- Insert the batteries. Use torx 6 screw-driver to open/close the battery compartment. Automatically a measurement is started.
- To start another measurement:
- press the button A indicated in the Figure (some force might be necessary to press the button),
- schedule a new measurement with the App.
- Allow 45 seconds for instrument self-test.
- Whenever possible, the monitor should be kept with the batteries inserted (Power ON).

### **BLUETOOTH CONNECTION**

Default tool for analysis and reporting is the Corentium PRO app:

- Go to your App Store / Google play store and search for Corentium PRO.
- Open the Corentium PRO app.
- In the first screen, wait until the monitor is discovered and it is shown in the list of devices:
- Then, select the monitor and connect. NOTE:
- Configure your profile in Settings & Profile;
- The reporting option can be used after 24 hours of measurement.

### STATUS LIGHTS

- Flashing green, yellow and red: Monitor selftest.
- Flashing green: Operation mode.
- Flashing yellow: Attention. Connect to the Corentium PRO app for instruction.
- Flashing red: Error. Connect to the Corentium PRO app for instructions.
- Blue flash and beep: Bluetooth connect.
- Blue flash (once): Bluetooth disconnect.
- Continuous blue: USB connected.

### **USB CONNECTION**

- Open CRA PC Software (refer to Installation Guide and Software Manual).
- Connect monitor to PC via USB.

NOTE: Using the CRA PC Software, the transfer of data from monitor to PC can be done after 24 hours of measurement.

#### **COMPLIANCES**

The monitor and the batteries must not be disposed of as ordinary household waste. The materials used in Corentium Pro can be recycled. It is the user's environmental responsibility to ensure that electronic equipment and batteries are disposed of in accordance with national regulations. Users should contact the seller or their local authority for information about environmentally friendly waste disposal.

In the event of incorrect use or operation of the monitor, Airthings AS cannot be held responsible for any losses resulting from failure or from the loss of measurement data.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residual installation. This equipment generates uses and can radiate frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/ TV technician for help

ICES-003 Class B Notice This Class B digital apparatus complies with Canadian ICES-003.

Avis NMB-003, Classe B Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Corentium® is a registered trademark of Airthings AS.

The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by Airthings is under license.

Airthings AS, Oslo, Norway. v 1.1

© 2016 Airthings AS. All rights reserved.